

EXECUTIVE SUMMARY

This report presents the data summary and preliminary conceptual site models of Operable Unit 9 investigation areas, Hill Air Force Base, Utah (Hill AFB). Operable Unit 9 is one of nine operable units being investigated at Hill AFB, which was placed on the National Priorities List (NPL), or “Superfund Program”, in July of 1987. Operable Unit 9 (OU 9) currently includes the Base Golf Course area, the West Gate area (Zones 11 and 12), Ponds 1 and 3, Building 454, and the Base-wide ground-water investigation. The Pond 6 and the Defense Reutilization Marking Office (DRMO) storage yard site may also be added to the OU 9 site investigation list, but has not been formalized at this time.

Various field investigation programs have been conducted during the North Area Site Inspection (SI) (Montgomery Watson, 1999) and the Remedial Investigation/Feasibility Study (RI/FS) including: monitoring well installation and sampling, Cone Penetrometer Testing (CPT) and direct-push ground-water sampling, and soil sampling at the OU 9 sites. The field and analytical results associated with these field programs are documented in this data summary report. The data that were collected from December 1995 to March 1998 and presented in this report were previously validated as part of the North Area SI report. A separate data validation was performed for data collected from April 1998 to April 2000 (as part of the RI/FS investigation) and are presented in Section 3.0 of this document.

Preliminary conceptual site models were developed for the Golf Course and West Gate investigation areas. These models describe the potential contaminant sources, contaminants of concern, and the likely transport pathways based on the results of investigations completed through April 2000. Preliminary conceptual site models were not developed for Ponds 1 and 3, Building 454, or the Pond 6/DRMO storage yard site because these investigations are relatively new and require additional characterization.

Volatile Organic Compounds (VOCs) are the primary contaminants detected in OU 9 ground water. The VOCs most frequently detected above their respective Maximum

Contaminant Levels (MCLs) in OU 9 ground water include: trichloroethene (TCE) and tetrachloroethene (PCE). Other VOCs detected include: 1,1,1-trichloroethane (1,1,1-TCA), 1,2-dichloroethane (1,2-DCA), trans-1,2-dichloroethene (trans-1,2DCE) and cis-1,2-dichloroethene (cis-1,2-DCE). In addition, gasoline and diesel range organic compounds (benzene, toluene, ethylbenzene, and naphthalene) have also been detected, but at concentrations below their respective MCLs.

TCE is the most widespread contaminant at OU 9 sites and occurs in concentrations up to 180 µg/l. The highest TCE concentrations on-Base have been observed at 85 feet below ground surface (bgs) near Building 1285 in Zone 12 of the West Gate area. This detection is also currently the maximum depth at which TCE has been detected in OU 9. The largest off-Base OU 9 ground water TCE detection of 15 µg/l is found at monitoring well U9-11-003 located at about 1500 North on Main Street in the city of Sunset.

Limited soil investigations have been completed at the Golf Course and West Gate investigation areas. The purpose of these soil investigations was to determine potential on-Base sources of shallow ground-water contamination. In the Golf Course area, Building 710 (maintenance shop) is the likely source. Sources in the West Gate area are still suspect since the results of the soil investigations have not been conclusive.